ABSTRACT

Polypeptides capable of modulating the autoimmune response of an individual to human acetylcholine receptor (hAChR), more particularly polypeptides corresponding entirely or partially to the extracellular domain of hAChR α-subunit, are useful in the diagnosis and treatment of myasthenia gravis. Preferred polypeptides are polypeptides corresponding to amino acid residues 1-121 or 122-210 of the hAChR α-subunit sequence, and polypeptides corresponding to amino acid residues 1-121, 1-210 or 1-205 of the hAChR α-subunit sequence in which is inserted, between amino acid residues 58 and 59, a sequence of 25 amino acid residues encoded by the p3A exon of the hAChR α-subunit gene, and fragments, analogs, fused, soluble and denatured forms thereof. DNA molecules encoding said polypeptides are also provided.